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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.
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09/421,506 10/19/99 ALBANI

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EXAMINER

VANDER VEGT, F

ART UNIT

PAPER NUMBER

1644

DATE MAILED:

01/05/01

**Please find below and/or attached an Office communication concerning this application or proceeding.**

**Commissioner of Patents and Trademarks**

# Office Action Summary

Application No.  
09/421,506

Applicant(s)  
Albani

Examiner  
F. Pierre VanderVegt

Group Art Unit  
1644



- ☐ Responsive to communication(s) filed on \_\_\_\_\_.
- ☐ This action is FINAL.
- ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11; 453 O.G. 213.

A shortened statutory period for response to this action is set to expire three month(s), or thirty days, whichever is longer, from the mailing date of this communication. Failure to respond within the period for response will cause the application to become abandoned. (35 U.S.C. § 133). Extensions of time may be obtained under the provisions of 37 CFR 1.136(a).

## Disposition of Claim

- ☒ Claim(s) 1-219 is/are pending in the application.
- Of the above, claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- ☐ Claim(s) \_\_\_\_\_ is/are rejected.
- ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- ☒ Claims 1-219 are subject to restriction or election requirement.

## Application Papers

- ☐ See the attached Notice of Draftsperson's Patent Drawing Review, PTO-948.
- ☐ The drawing(s) filed on \_\_\_\_\_ is/are objected to by the Examiner.
- ☐ The proposed drawing correction, filed on \_\_\_\_\_ is ☐ approved ☐ disapproved.
- ☐ The specification is objected to by the Examiner.
- ☐ The oath or declaration is objected to by the Examiner.

## Priority under 35 U.S.C. § 119

- ☐ Acknowledgement is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d).
- ☐ All ☐ Some\* ☐ None of the CERTIFIED copies of the priority documents have been
- ☐ received.
- ☐ received in Application No. (Series Code/Serial Number) \_\_\_\_\_.
- ☐ received in this national stage application from the International Bureau (PCT Rule 17.2(a)).

\*Certified copies not received: \_\_\_\_\_

- ☐ Acknowledgement is made of a claim for domestic priority under 35 U.S.C. § 119(e).

## Attachment(s)

- ☐ Notice of References Cited, PTO-892
- ☐ Information Disclosure Statement(s), PTO-1449, Paper No(s). \_\_\_\_\_
- ☐ Interview Summary, PTO-413
- ☐ Notice of Draftsperson's Patent Drawing Review, PTO-948
- ☐ Notice of Informal Patent Application, PTO-152

--- SEE OFFICE ACTION ON THE FOLLOWING PAGES ---

### DETAILED ACTION

This application claims priority to provisional application 60/105,018.

Claims 1-219 are currently pending in this application.

5                   **Please Note:** In an effort to enhance communication with our customers and  
reduce processing time, Group 1640 is running a Fax Response Pilot for Written  
Restriction Requirements. A dedicated Fax machine is in place to receive your  
responses. The Fax number is 703-305-3704. A Fax cover sheet is attached to  
this Office Action for your convenience. We encourage your participation in this  
10                   Pilot program. If you have any questions or suggestions please contact Paula  
Hutzell, Supervisory Patent Examiner at Paula.Hutzell@uspto.gov or 703-308-  
4310. Thank you in advance for allowing us to enhance our customer service.  
Please limit the use of this dedicated Fax number to responses to Written  
Restrictions.

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### *Election/Restriction*

1. Restriction to one of the following inventions is required under 35 U.S.C. 121:
  - I. Claims 1-26, drawn to an artificial APC comprising liposome, MHC, antigen and  
20                   accessory molecule, classified in class 435, subclass 325.
  - II. Claims 27-53, drawn to an artificial APC comprising liposome, MHC, antigen,  
accessory molecule and co-stimulatory molecule, classified in class 435, subclass  
325.
  - 25                   III. Claims 54-80, drawn to an artificial APC comprising liposome, MHC, antigen,  
accessory molecule and cell modulation molecule, classified in class 435, subclass  
325.
  - 30                   IV. Claims 81-108, drawn to an artificial APC comprising liposome, MHC, antigen,  
accessory molecule, co-stimulatory molecule and cell modulation molecule,  
classified in class 435, subclass 325.
  - 35                   V. Claims 109-123, drawn to an artificial APC comprising liposome, MHC, antigen,  
accessory molecule, co-stimulatory molecule, cell modulation molecule adhesion  
molecule, irrelevant molecule and cholesterol, classified in class 435, subclass 325.

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- VI. Claims 124-149, drawn to an artificial APC comprising solid support, liposome, MHC, antigen, and accessory molecule, classified in class 435, subclass 325.
- VII. Claims 150-161, drawn to a method of making an artificial antigen presenting cell, classified in class 435, subclass 325.
- VIII. Claims 162-167 and 176-185 and 219, drawn to a method of identifying/isolating T cells of interest, classified in class 435, subclass 34.
- 10 IX. Claims 168-175 and 218, drawn to a method of modulating T cells, classified in class 435, subclass 375.
- X. Claims 186-194, drawn to a method of treating an individual by altering Th1/Th2 ratio, classified in class 424, subclass 93.71.
- 15 XI. Claims 195-196, drawn to computer modeling of MHC, classified in , subclass 19.
- XII. Claims 215, drawn to an immunomodulatory column, classified in class , subclass .
- 20 XIII. Claims 216-217, drawn to a method of identifying T cell reactivity genes, classified in class 435, subclass 6.

2. The inventions are distinct, each from the other because of the following reasons:

25 Inventions I-VI are unrelated. Inventions are unrelated if it can be shown that they are not disclosed as capable of use together and they have different modes of operation, different functions, or different effects (MPEP § 806.04, MPEP § 808.01). In the instant case the different inventions are drawn to different artificial antigen presenting cells, each of which has different components which alone or in concert confer specific properties upon the APC.

30 Inventions VII and I-VI are related as process of making and products made. The inventions are distinct if either or both of the following can be shown: (1) that the process as claimed can be used to make other and materially different product or (2) that the product as claimed can be made by another and materially different process (MPEP § 806.05(f)). In the instant case the artificial antigen presenting cells of Groups I-VI can also be made in other manners.

35 Inventions VIII, IX and X are unrelated. Inventions are unrelated if it can be shown that they are not disclosed as capable of use together and they have different modes of operation, different functions, or different effects (MPEP § 806.04, MPEP § 808.01). In the instant case the

different inventions are drawn to distinct methods of using artificial antigen presenting cells. Each method requires different steps for practice, has a different end result and is monitored uniquely from the other methods.

Inventions [I-X & XII-XIII] and XI are unrelated. Inventions are unrelated if it can be shown that they are not disclosed as capable of use together and they have different modes of operation, different functions, or different effects (MPEP § 806.04, MPEP § 808.01). In the instant case the different inventions of Groups I-X & XII-XIII do not require or involve the computer modeling method of Group XI.

Inventions I-VI and XII are unrelated. Inventions are unrelated if it can be shown that they are not disclosed as capable of use together and they have different modes of operation, different functions, or different effects (MPEP § 806.04, MPEP § 808.01). In the instant case the different inventions are drawn to artificial antigen presenting cells which are of specific composition in Groups I-VI, while Group XII is drawn to a multichambered apparatus comprising any type of artificial antigen presenting cell, including those distinct from Groups I-VI.

3. Because these inventions are distinct for the reasons given above and have acquired a separate status in the art because of their recognized divergent subject matter, restriction for examination purposes as indicated is proper.

4. Applicant is advised that the reply to this requirement to be complete must include an election of the invention to be examined even though the requirement be traversed (37 CFR 1.143).

### ***Conclusion***

5. Papers related to this application may be submitted to Technology Center 1600, Group 1640 by facsimile transmission. Papers should be faxed to Group 1640 via the PTO Fax Center located in Crystal Mall 1. The faxing of such papers must conform with the notice published in the Official Gazette, 1096 OG 30 (November 15, 1989). The fax phone number for official documents to be entered into the record for Art Unit 1644 is (703)305-3014.

Any inquiry concerning this communication or earlier communications from the Examiner should be directed to F. Pierre VanderVegt, whose telephone number is (703)305-6997. The Examiner can normally be reached Tuesday through Friday and odd-numbered Mondays (on year

2000 366-day calender) from 6:30 am to 4:00 pm ET. A message may be left on the Examiner's voice mail service. If attempts to reach the Examiner by telephone are unsuccessful, the Examiner's supervisor, Ms. Christina Chan can be reached at (703)308-3973. Any inquiry of a general nature or relating to the status of this application should be directed to the Technology Center 1600 receptionist, whose telephone number is (703)308-0196.

F. Pierre VanderVegt, Ph.D.  
Patent Examiner  
Technology Center 1600  
January 4, 2001



**F. PIERRE VANDERVEGT**  
**PATENT EXAMINER**